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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,000	12/14/2001	Juha Iso-Sipila	944-001.032	4992

4955 7590 07/13/2005

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EXAMINER

STORM, DONALD L

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/017,000

Applicant(s)

ISO-SIPILA, JUHA

Examiner

Donald L. Storm

Art Unit

2654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

Higgins

2. Claims 1, 3-10, 12, 14, 16-17, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Higgins et al. [US Patent 6,266,633] using the same rationale as in the prior Office action (mailed December 13, 2004).

Claim Rejections - 35 USC § 103

Higgins and Hermansky

3. Claims 2, 11, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. [US Patent 6,266,633] in view of Hermansky, Herman, "RASTA Processing of Speech," IEEE Trans. Speech and Audio Proc., vol. 2, no. 4, October 1994, pp. 578-589, using the same rationale as in the prior Office action (mailed December 13, 2004).

Higgins and ETSI ES 201 108 V1.1.2

4. Claims 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higgins et al. [US Patent 6,266,633] in view of ETSI ES 201 108 V1.1.2 using the same rationale as in the prior Office action (mailed December 13, 2004).

Response to Arguments

5. The prior Office action, mailed December 13, 2004, requires corrected drawings, objects to the claims, and rejects claims under 35 USC § 102 and § 103, citing Higgins and others. The Applicant's arguments and changes in AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION, filed March 9, 2005, have been fully considered with the following results.

6. The corrected substitute drawings (2 sheets, received March 9, 2005) are present and are now the Figs. 1A, 1B, 5A, 5B of record. These drawing sheets are substantively acceptable to the Examiner. Accordingly, the objections are removed.

7. With respect to objection to those claims needing clarification, the changes entered by amendment provide clear descriptions of the claimed subject matter. Accordingly, the objections are removed.

8. With respect to rejection of claims under 35 USC § 102 and § 103, citing Higgins alone and in combination, the Applicant's arguments appear to be as follows:

a. The Applicant's argument appears to be that Higgins subtracting the noise floor from the magnitude spectra and setting negative results to zero is not "normalization" and Higgins' noise-floor-subtracted magnitude spectra are not normalized speech features. This argument is not persuasive because it is the content and functionality of the recited limitation of normalizing that equates to that functionality of Higgins. For example at page 10, lines 12-14, this application's specification discusses a normalization process that changes the power of noise relative to power of speech; this is the content and functionality of the section of Higgins as cited

in the prior Office action. It is not required that the terminology applied to the prior art elements be identical to claim terminology. The Applicant's further discussion of increasing high-frequency power by normalization is not a limitation of the claimed invention with normalizing.

b. The Applicant's argument appears to be that Higgins' blind deconvolution filter is not used for filtering, but instead is used for normalization. This argument is not persuasive because Higgins' [at column 5, lines 52-58] blind deconvolution filter rejects frequencies.

c. The Applicant's argument appears to be that noise reduction cannot be carried out by normalization, but must only be carried out subsequent to normalization. This argument is not persuasive because the features upon which the Applicant's argument relies are not recited in the rejected claims. Neither the claims of the application nor the specification is explicitly restricted to the narrower limitation on which the Applicant's arguments are based. For example, page 10, lines 12-14, of this application's specification discusses a normalization process that changes the power of noise relative to power of speech.

The Applicant's arguments have been fully considered but they are not persuasive. Accordingly, the rejections are maintained.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any response to this action should be mailed to:

Mail Stop AF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (please mark "EXPEDITED PROCEDURE"; for formal communications and for informal or draft communications, additionally marked "PROPOSED" or "DRAFT")

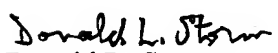
On and After July 15, 2005, fax to:

(571) 273-8300.

Patent Correspondence delivered by hand or delivery services, other than the USPS, should be addressed as follows and brought to U.S. Patent and Trademark Office, Customer Service Window, **Mail Stop AF**, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L. Storm, of Art Unit 2654, whose telephone number is (571) 272-7614. The examiner can normally be reached on weekdays between 8:00 AM and 4:30 PM Eastern Time. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Inquiries regarding the status of submissions relating to an application or questions on the Private PAIR system should be directed to the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028 between the hours of 6 a.m. and midnight Monday through Friday EST, or by e-mail at: ebc@uspto.gov. For general information about the PAIR system, see <http://pair-direct.uspto.gov>.


Donald L. Storm
June 30, 2005


RICHMOND DORVIL
SUPERVISORY PATENT EXAMINER